KODAK
Miniloader 2000 P

United States:

**FEDERAL LAW RESTRICTS THIS DEVICE
TO SALE OR ORDER BY PHYSICIANS.**

CONTENTS

GENERAL DESCRIPTION

The KODAK Miniloader 2000 P is a unit for loading and unloading of film cassettes. The load/unload modules are microprocessor-controlled. Special functions, statistics, and controls are accessed by the soft switches and display unit at the front panel.

The KODAK Miniloader 2000 P can hold up to two film supply magazines and is compatible only with KODAK MIN-R 2 Cassettes with button. A kit for KODAK X-OMATIC Video Film Holder 8"x10" is available as an accessory.

Exposed film is automatically removed from the cassette inserted into the KODAK Miniloader 2000 P, the cassette reloaded with unexposed film and returned to the operator in less than 15 seconds.
Exposed film is fed into the integrated KODAK M35-M X-OMAT Processor .
The processor is capable of operating at 2 different speeds for either Standard or Extended cycle processing of film. The appropriate speed for your application will be set on installation of the unit.

The operator interface is at the front of your KODAK Miniloader 2000 P for cassette insertion and exit, film supply magazine access and film exit. The operator control panel and access to the integrated processor are also at the front of your KODAK Miniloader 2000 P.

NOTE:

**This Operator Guide refers to the Miniloader section
of the KODAK Miniloader 2000 P.
For the processor section, please refer to the Operator Guide
KODAK M35-M X-OMAT Processor .**

IMPORTANT:

**Please be aware of the fact that this unit may only be used for loading and
unloading of film cassettes (sizes and types as specified on page 1-2
of this Operator Guide) and feeding exposed films into the integrated
KODAK M35-M X-OMAT Processor.
The unit must not be used for any other operations.**

SPECIFICATIONS

Cassette Sizes and Types:	**KODAK MIN-R 2 Cassettes (button cassettes only)** 18 x 24 cm, 24 x 30 cm **KODAK X-OMATIC Video Film Holder** 8" x 10" **This kit is available as an accessory.**
Number of Supply Magazines:	2 supply magazines Supply magazines are available for the above-mentioned cassette sizes. Two sizes may be installed in the KODAK Miniloader 2000 P at any one time. Each supply magazine can contain up to 115 films .
Cassette Return Time:	15 seconds
Capacity:	Up to 150 cassettes/hour, depending on processor speed
Dimensions:	width 723 mm (28.5") height 1372 mm (52.8") depth 773 mm (30.4")
Space Requirements:	Allow 600 mm (24") clearance at each side for servicing, and 600 mm (24") clearance above the lid. A minimum of 900 (36") mm clearance is required in front of the unit to allow the upper section to be moved forward for service of the KODAK M35-M X-OMAT Processor.
Weight:	250 kg (551 lbs) as shipped, with package, without processor and stand
Power Supply KODAK Miniloader2000 P:	100/115/120/200/220/230/240 V 50/60 Hz 4.4/ 2.2 A **SPECIAL EUROPEAN REQUIREMENT:**

> **Voltage set on installation:**
> (A sticker showing the voltage set on installation will be fixed on this space by your KODAK SERVICE PROVIDER)

Max. Power Consumption:	Miniloader 0,3 kW

Heat Dissipation: 2200 kJ   (2088 BTU)

Noise level: Stand-by - < 40 dBA
     Operation - tbd

Recommended   temperature 15-30° C (59-86° F)
Operating Conditions: humidity 20-60% RH
     atmospheric pressure 1.03×10^5 to 0.8×10^5 Pa

Fuses (Europe)   F1: T 1,60 A
for KODAK   F3: T 8,00 A   F4: T 6,30 A
Miniloader 2000 P   F5: T 3,15 A   F6: T 4,00 A
     F7: T 1,60 A   F8: T 3,15 A
     F9: T 3,15 A   F10: T 3,15A
     F11: T 3,15 A

Note:

**For chemicals, air exhaust and all requirements regarding the processor section,
please refer to the Operator Guide of the KODAK M35-M X-OMAT Processor.**

DECLARATION OF CONFORMITY

We declare our sole responsibility that the product

KODAK Miniloader 2000 P
Cat No. 718 5200.

to which this declaration relates is in conformity with the following standards and, therefore, bears a CE mark:

EN 60601-1/1990 , EN 60601-1-2/19994, EN 61000-3-2/1995 and
EN 61000-3-3/1995.

following the provisions of the applicable directives

93/42/EEC and amendments.

SAFETY STANDARDS

The KODAK Miniloader 2000 P is in conformity with international safety requirements and bears following safety marks:

- UL (Underwriter Laboratories, UL 122)

- CUL (Underwriter Laboratories test for Canadian Standards Association, CSA 22.2 No. 950)

- GM (TÜV Rheinland, EN 60601-1)

WARNINGS

WARNINGS:

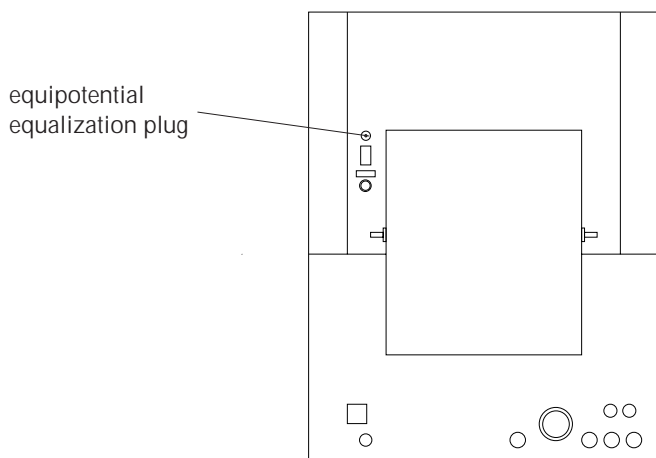**Dangerous voltages are present in this machine.**
The operator is only allowed to open the top cover and the magazine door of the KODAK Miniloader and to separate the processor section from the Miniloader section as described on page 1-35.
This product does not contain any parts that would have to be repaired by the operator.
Do not perform repairs yourself, call for a qualified KODAK SERVICE person.
The venting slots at the sides of the unit must not be covered.

According to European safety regulations for medical devices, the KODAK Miniloader 2000 P must be properly connected to the equipotential equalization device (E^{2}D), if the unit is operated within a distance of 1.5 m from the patient. The E^{2}D and the connecting cable must be provided by the customer. The purpose of the equipotential equalization device is to ensure that all medical devices are connected to the same ground potential.
If, on installation, your KODAK SERVICE PROVIDER connected the KODAK Miniloader 2000 P to the equipotential equalization device using the equipotential equalization plug, this connection may not be interrupted, i. e. you are not allowed to pull off the cable coming from the equipotential equalization device (see illustration below).

equipotential
equalization plug

OPERATING CONTROLS, STATUS LIGHTS AND DISPLAY

THE DISPLAY . . . .

MAGAZINE
POSITION   SIZE   TYPE   QUANTITY OF FILMS

GREEN

ORANGE

RED

```
MAG. 1 :   18 x 24 cm   M      ▮▮▯▯
MAG. 2 :   24 x 30 cm   M  #2  ▮▯▯▯▯
FUNC   UNLOAD   LOAD   SERIAL   DOOR
```

STATUS
LIGHTS

DEFINITION OF
THE SOFT SWITCHES

SOFT SWITCHES
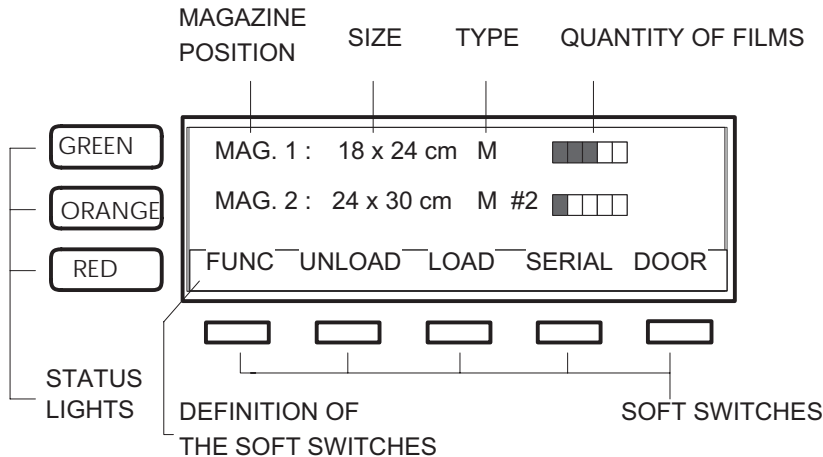
M   Mammography (KODAK MIN-R 2 Cassettes **with button**)

#2   Alternative or Special film (for a film of the same size already being used,
                              but with a different emulsion.

?   The ? sign indicates that a fresh magazine has been installed and until it has
     been used the KODAK Miniloader 2000 P does not know the number of
     films within the supply magazine.

STATUS LIGHTS . . . .

GREEN On   KODAK Miniloader 2000 P is ready,
                        cassette may be inserted.

ORANGE On   In operation, cassette is being unloaded/loaded.
                        Or complete cycle not possible - in that case, please
                        observe messages on display.

GREEN On   KODAK Miniloader 2000 P is ready, film is
ORANGE On   in processor.

RED Flashing   **Warning** indication, observe messages on display.

RED On   Malfunction indication, observe messages on the display and follow instructions given.

An audible alarm will draw attention to the RED status light.

NOTE:

**The KODAK Miniloader 2000 P is provided with an integrated sensor
which will automatically dim all lights of the display
when the unit is placed in a darkroom.
This function is optional and has to be set by your KODAK SERVICE PROVIDER.**

MAGAZINE STATUS

(shown on the display)

| | | | | | more than 70 films

| | | | | | 50 – 70 films

| | | | | | 30 – 50 films

| | | | | | 10 – 30 films

| | | | | | 10 or less films

(flashing)

EMPTY   magazine empty
                     (new films should be loaded now)

OPERATION

After the cassette has entered the KODAK Miniloader 2000 P the cassette size is determined and the correct magazine selected.
The cassette is opened, the exposed film is removed and transported to the KODAK M35-M X-OMAT Processor. The KODAK Miniloader 2000 P initiates the KODAK M35-M X-OMAT Processor. At the same time a fresh film is selected from the magazine and loaded into the cassette.
The cassette is closed, then returned to the operator within 15 seconds from cassette insertion.

NOTE:

The KODAK Miniloader 2000 P has not been tested and verified for transportation or operation in a van.

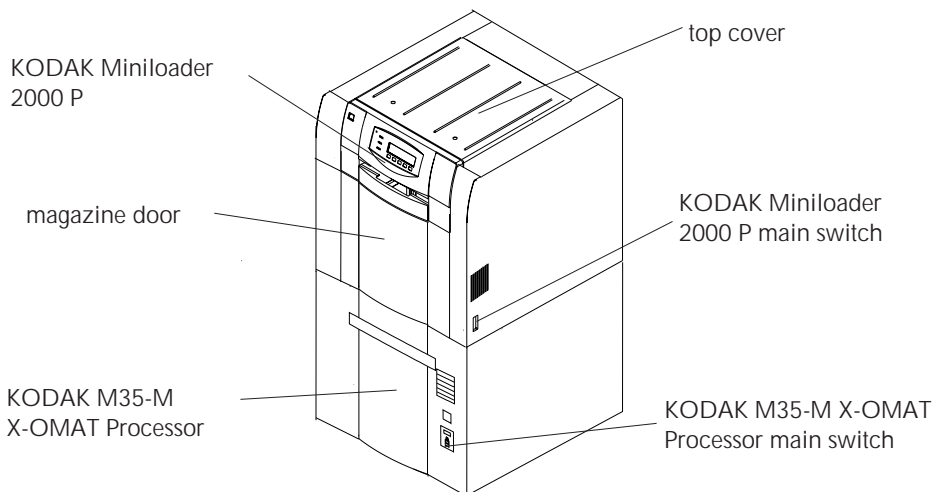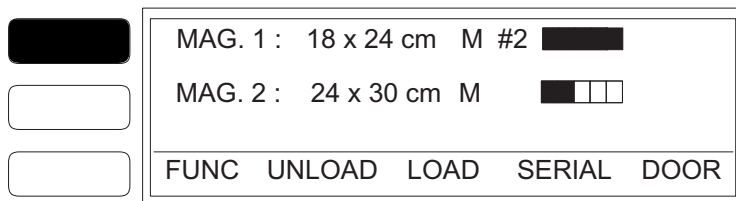## SWITCHING ON THE SYSTEM

Check that all racks and crossovers are seated correctly with developer and fixer solutions at the overflow level. Ensure that the magazine door and the top cover are closed.
Turn on the water.

Switch On:

KODAK Miniloader 2000 P

top cover

magazine door

KODAK Miniloader 2000 P main switch

KODAK M35-M X-OMAT Processor

KODAK M35-M X-OMAT Processor main switch

After switching on the unit, the Miniloader section of the KODAK Miniloader 2000 P will indicate by the GREEN status light that it is ready for use.

```
┌──────────┐  ┌─────────────────────────────────────┐
│██████████│  │ MAG. 1 :   18 x 24 cm   M  #2 █████  │
└──────────┘  │                                      │
┌──────────┐  │ MAG. 2 :   24 x 30 cm   M     █□□□   │
│          │  │                                      │
└──────────┘  │                                      │
┌──────────┐  │ FUNC   UNLOAD   LOAD   SERIAL   DOOR │
│          │  │                                      │
└──────────┘  └─────────────────────────────────────┘
```

NOTE:

The integrated KODAK M35-M X-OMAT Processor will require a warm-up period of approx. 20 minutes.

This will not be indicated on the display of the Miniloader section.

Before feeding a cassette into the KODAK Miniloader 2000 P, please wait until the correct developer temperature has been reached and is shown on the small display above the main switch of the KODAK M35-M X-OMAT Processor (see illustration below).

This temperature depends on the speed (standard or extended cycle) set by your KODAK SERVICE PROVIDER on installation of the unit. It is stated in your Operator Guide for the KODAK M35-M X-OMAT Processor.


display of the developer temperature
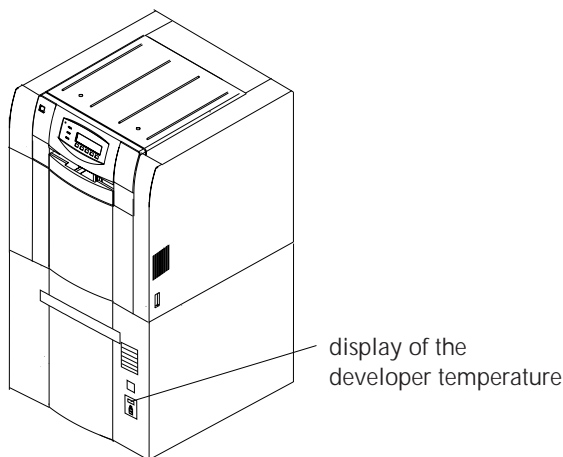
INSERTING A CASSETTE . . . .

The KODAK Miniloader 2000 P will only accept KODAK MIN-R 2 Cassettes
with the button.

Check that the GREEN status light is on and the display indicates that a corresponding
size of magazine is available.

| | MAG. 1 : 18 x 24 cm M #2 ▬▬▬ |
| | MAG. 2 : 24 x 30 cm M ▬□□□ |
| | FUNC UNLOAD LOAD SERIAL DOOR |
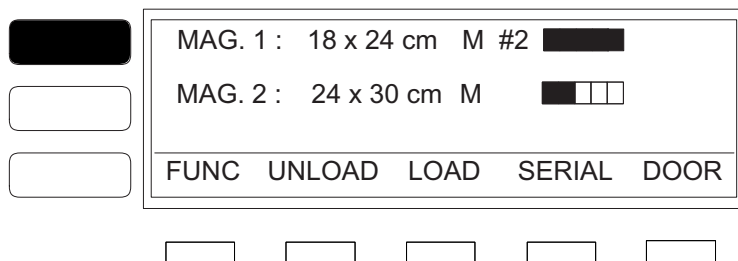
Insert the cassette **latch up and metal edge towards the KODAK Miniloader
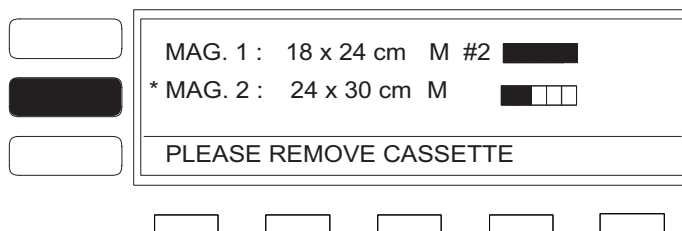2000 P.**
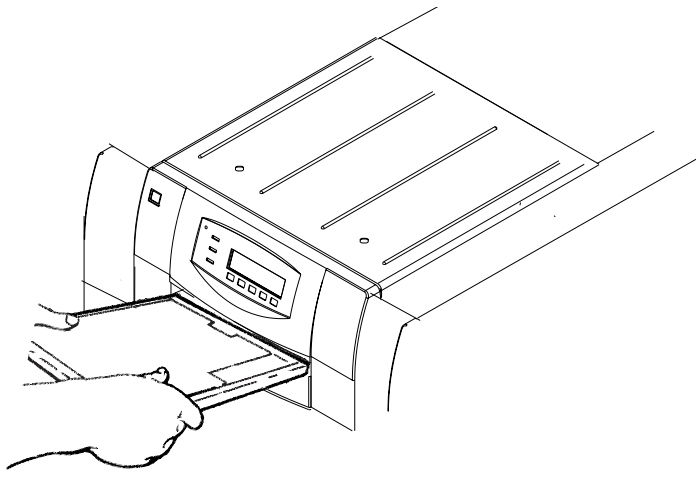
WARNING:
Do not place your hands in cassette entrance.
Release cassette as soon as it is pulled into the KODAK Miniloader 2000 P.

The cassette is then pulled into the KODAK Miniloader 2000 P, and the ORANGE status light comes on. The display shows:

```
MAG. 1 :   18 x 24 cm   M  #2  ███████
* MAG. 2 :   24 x 30 cm   M       ██▢▢▢

IN OPERATION
```
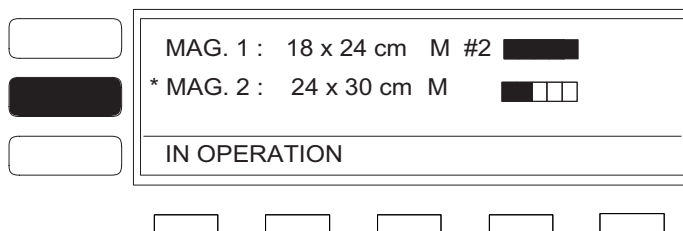
This indicates that a cassette is inside the KODAK Miniloader 2000 P, and an unload/load operation cycle is in progress.

After loading with a fresh film, the cassette is closed and returned. The display shows:

```
MAG. 1 :   18 x 24 cm   M  #2  █████
* MAG. 2 :   24 x 30 cm   M       ██▢▢▢

PLEASE REMOVE CASSETTE
```
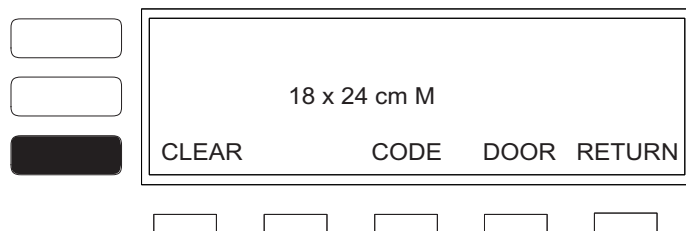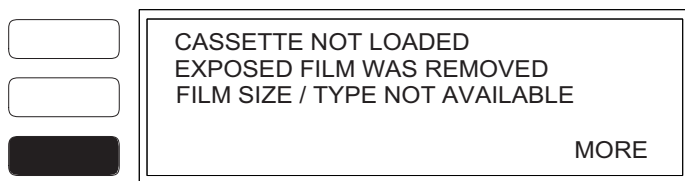
Remove the cassette.

The GREEN status light goes on. The display returns to the main menu.

The KODAK Miniloader 2000 P is now ready for the next operation.

If the GREEN and yellow status lights are on, a film is still inside the processor, but the system is ready to accept another cassette.

* = Magazine in use

Should the RED status light flash and the audible alarm sound, please observe the messages on the display. The warning message must be cancelled by pressing the soft switch marked < CLEAR > after the cassette has been removed. If a message consists of more than 3 display lines, it is divided into several screens, and you can scroll through it by pressing the soft switches <MORE > or < RETURN >.

```
CASSETTE NOT LOADED
EXPOSED FILM WAS REMOVED
FILM SIZE / TYPE NOT AVAILABLE

                                    MORE
```

```

                    18 x 24 cm M

CLEAR               CODE    DOOR   RETURN
```

If the RED status light is constantly on and the audible alarm sounds a malfunction has occurred. In this case follow the instructions given.

```
CAUTION !
PLEASE CALL FOR SERVICE
. . . . . . . . .

```
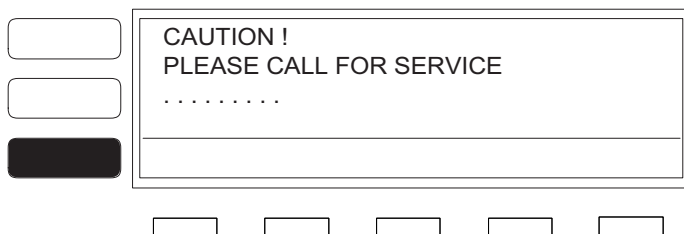
SWITCHING OFF THE KODAK Miniloader 2000 P
· ·

Switch off the KODAK Miniloader 2000 P as indicated below.

KODAK Miniloader
2000 P main switch

KODAK M35-M X-OMAT
Processor main switch
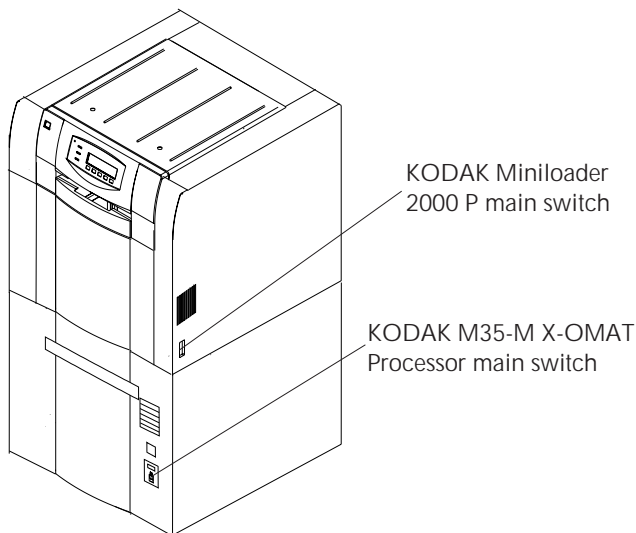
Turn off the water supply.

ACCESS TO MAGAZINES
· ·

The magazine door can only be opened in the READY mode. Opening the door will turn on the ORANGE light. When the door is closed again the display returns to the main display, and the GREEN status light goes on.

```
MAG. 1 :   18 x 24 cm   M  #2  ████

MAG. 2 :   24 x 30 cm   M      EMPTY

FUNC   UNLOAD   LOAD   SERIAL   DOOR
```
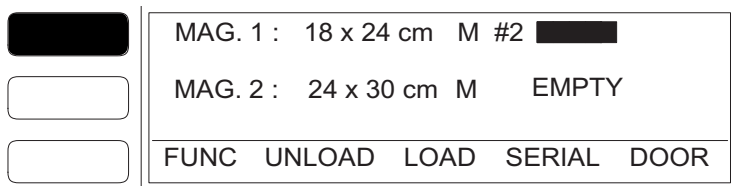
With the GREEN status light on, the magazine door can be opened by pressing the soft switch <DOOR> on the display.
When the magazine door is opened, the display changes as follows, and the status light changes to ORANGE.
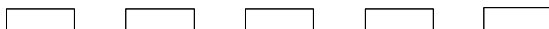
```
MAG. 1 :   18 x 24 cm   M  #2  ████

MAG. 2 :   24 x 30 cm   M      EMPTY


CLOSE THE DOOR PLEASE
```

In case of difficulties with the door opening via soft switch <DOOR> on the display, you can also open the top cover first (see page 1-32), and then pull the string as shown in the figure below. This will release the magazine door.

string

Details for removing and loading supply magazines are given in the following chapter "LOADING THE SUPPLY MAGAZINES".

LOADING THE SUPPLY MAGAZINES

Open the magazine door by pressing the soft switch <DOOR> on the display.

MAG. 1 :	18 x 24 cm	M	#2 ▆▆▆
MAG. 2 :	24 x 30 cm	M	EMPTY
FUNC	UNLOAD	LOAD	SERIAL	DOOR
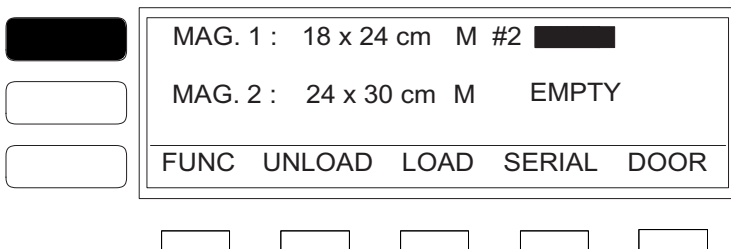
Disengage the empty supply magazine by lifting it slightly and pull it out.
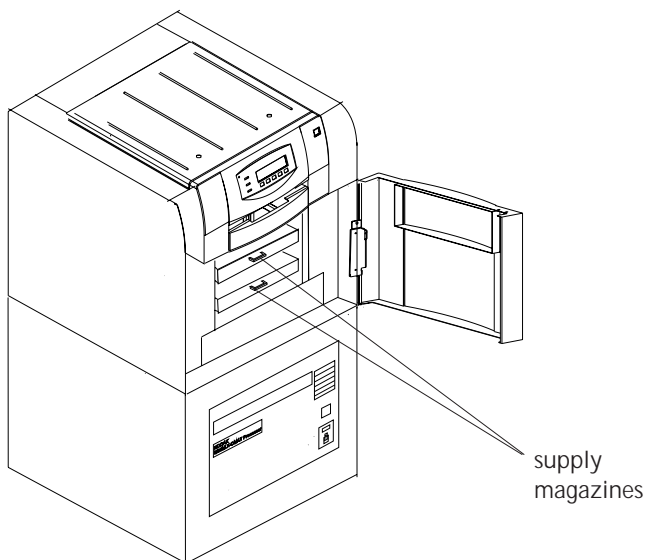
supply magazines

When a supply magazine is removed, the display will show the magazine level without size, application, type and film quantity.

Close the magazine door.

Reload the supply magazine in a dark room (lights off) as described on page 1-16.

Place the supply magazine on a flat surface in the darkroom.
Push both latches in and lift the lid to open the magazine.
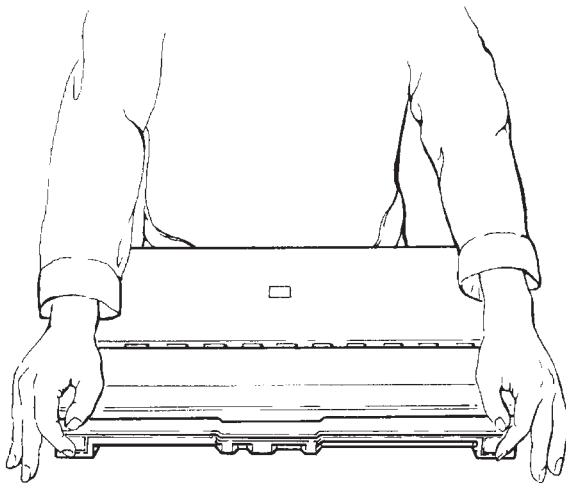
Open film pack. Remove films and riffle them carefully.
It might be helpful to divide the film pack in several stacks.
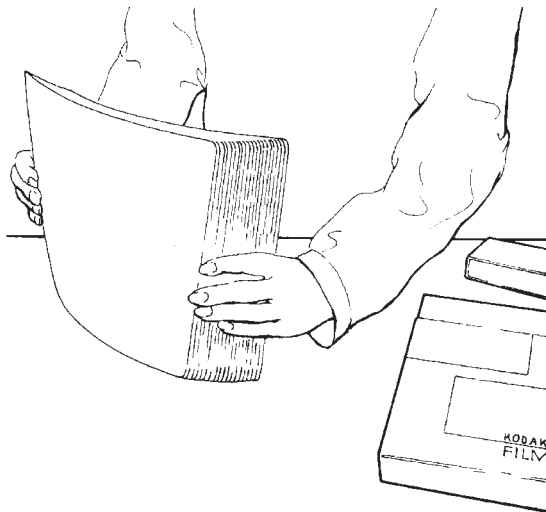
Remove any remaining films from the supply magazine.
Push the new films all the way into the supply magazine.
Place the films removed in the previous step, on top of the new films.They should be
used first. Do not load the supply magazine with more than 115 films.

Note:

Single emulsion films must be loaded into the supply magazine with the emulsion up.
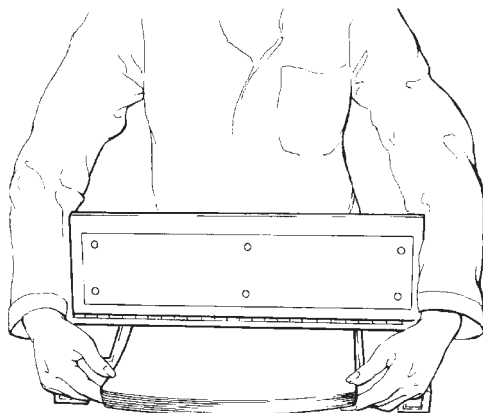
Close the magazine lid. You hear the latches "click".
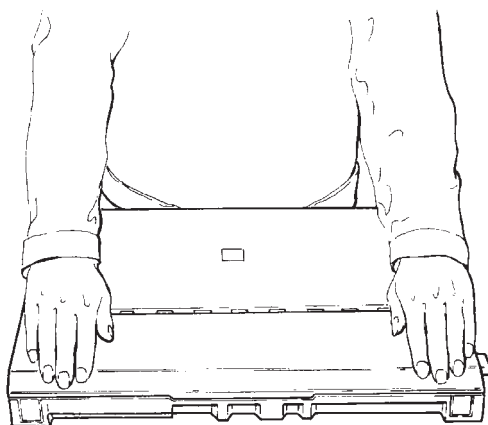
Open the magazine door again by pressing the soft switch <DOOR> on the display.
Slide the supply magazine in all the way to the stop, and then press it down to lock it in the tray.
The supply magazine must fit beyond the black rollers.

Close the magazine door.

When inserting a new supply magazine or the same magazine again, the display will show a '?' for the film quantity, because the magazine film quantity is not known until the first film is removed from the magazine. After closing the magazine door, the GREEN status light will be on again.The display will now show the film formats available.

```
┌──────────────────────────────────────────┐
│  MAG. 1 :   18 x 24 cm   M  #2  ████████  │
│                                            │
│  MAG. 2 :   24 x 30 cm   M        ?        │
│                                            │
│  FUNC   UNLOAD   LOAD    SERIAL   DOOR     │
└──────────────────────────────────────────┘
```
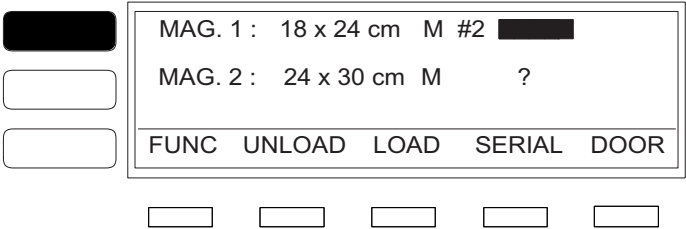
SPECIAL FUNCTIONS

Five soft switches are located below the display. The lowest display line shows the function of these switches.

```
MAG. 1 :   18 x 24 cm   M  #2  ████████

MAG. 2 :   24 x 30 cm   M        ██░░░

FUNC    UNLOAD    LOAD    SERIAL    DOOR
```
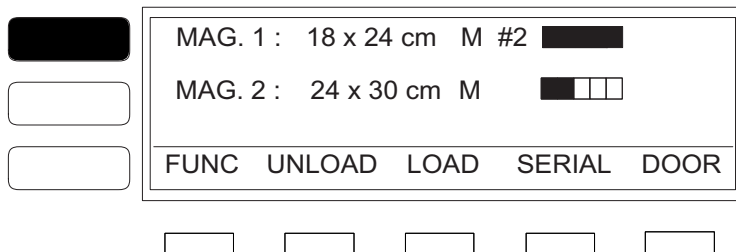
LOAD ONLY, **UNLOAD ONLY,** and **SERIAL UNLOADING** may be selected directly by the soft switches on the menu shown above.

Other special functions, such as **Type 2** (alternative grade of film), **USAGE** (statistics on used films), or displayed **LANGUAGE** may be selected manually via the soft switch <**FUNC**>.

LOAD ONLY . . . .

```
┌─────────────────────────────────────────────────┐
│  MAG. 1 :   18 x 24 cm   M  #2  ████████          │
│                                                   │
│  MAG. 2 :   24 x 30 cm   M          ██░░░░        │
│                                                   │
│  FUNC    UNLOAD    LOAD     SERIAL    DOOR         │
└─────────────────────────────────────────────────┘
```

When the KODAK Miniloader 2000 P is ready for operation you may select the "LOAD ONLY" mode by pressing <LOAD>. The display then shows the following:

```
┌─────────────────────────────────────────────────┐
│  LOAD  ONLY                                       │
│  INSERT EMPTY CASSETTE                            │
│                                                   │
│  TYPE 2                                  CLEAR    │
└─────────────────────────────────────────────────┘
```

An inserted empty cassette will be loaded only.

The KODAK Miniloader 2000 P checks whether a film is in the cassette.
If the cassette contains a film although you selected "LOAD ONLY", the following message will be displayed, and an audible alarm will be started. The film will be transported to the KODAK M35-M X-OMAT Processor, and the cassette will be loaded as requested.

```
           ┌─────────────────────────────────────────────────┐
           │  EXPOSED FILM WAS REMOVED                         │
           │  CASSETTE WAS NOT EMPTY                           │
           │                                                   │
  Flashing │  CLEAR            CODE    DOOR   RETURN            │
           └─────────────────────────────────────────────────┘
```

Pressing <CLEAR> will stop the alarm and return you to the main display.

UNLOAD ONLY ....

| MAG. 1 : | 18 x 24 cm | M #2 |
| MAG. 2 : | 24 x 30 cm | M |

FUNC   UNLOAD   LOAD   SERIAL   DOOR

If the KODAK Miniloader 2000 P is ready for operation you may select the "UNLOAD ONLY" mode by pressing <UNLOAD>. The display will then show the following, and an inserted cassette will be unloaded.

UNLOAD ONLY

CLEAR
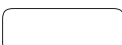
Depending on the parameter chosen by your KODAK SERVICE PROVIDER on installation of the unit, the cassette will now either be

- **returned open** (without a warning message), the display showing the following:

| MAG. 1 : | 18 x 24 cm | M #2 |
| MAG. 2 : | 24 x 30 cm | M |

PLEASE REMOVE CASSETTE

Or it will be

- **returned closed** with a warning message and an audible alarm, the display
showing the following:

```
                    ┌──────────────────────────────────────┐
┌──────────┐        │ CASSETTE NOT LOADED                  │
└──────────┘        │                                      │
┌──────────┐        │                                      │
└──────────┘        │                                      │
┌──────────┐        │                                      │
│ Flashing │        │                              CLEAR   │
└──────────┘        └──────────────────────────────────────┘
          ┌────┐   ┌────┐   ┌────┐   ┌────┐   ┌────┐
          └────┘   └────┘   └────┘   └────┘   └────┘
```

If the inserted cassette was empty for UNLOAD ONLY, the following message will be
displayed and an audible alarm will be started.

```
                    ┌──────────────────────────────────────┐
┌──────────┐        │ EXPOSED FILM NOT REMOVED             │
└──────────┘        │ PLEASE CHECK CASSETTE IN DARKROOM     │
┌──────────┐        │                                      │
└──────────┘        │                                      │
┌──────────┐        │ CLEAR          CODE   DOOR  RETURN    │
└──────────┘        └──────────────────────────────────────┘
          ┌────┐   ┌────┐   ┌────┐   ┌────┐   ┌────┐
          └────┘   └────┘   └────┘   └────┘   └────┘
```
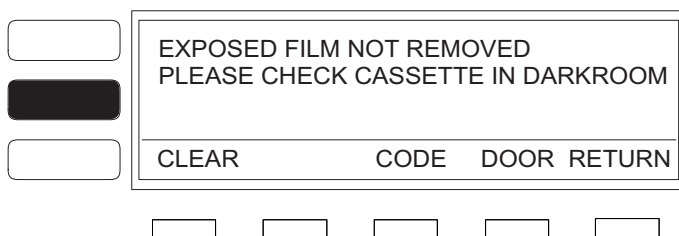
Press <CLEAR>. This will stop the alarm, and you will return to the main display.

SERIAL UNLOADING
. . . .

The SERIAL UNLOADING function permits continuous unloading of a magazine into the integrated KODAK M35-M X-OMAT Processor, using an empty cassette in the KODAK Miniloader 2000 P.

```
┌──────────────────────────────────────────┐
│  MAG. 1 :   18 x 24 cm   M  #2 ███████     │
│                                            │
│  MAG. 2 :   24 x 30 cm   M      ██□□□       │
│  ───────────────────────────────────────── │
│  FUNC   UNLOAD   LOAD   SERIAL   DOOR       │
└──────────────────────────────────────────┘
```

PROCEDURE

Press <SERIAL>. If there is no magazine level free, the following screen will be displayed:

```
┌──────────────────────────────────────────┐
│  SERIAL UNLOADING                          │
│  PLEASE REMOVE ANY MAGAZINE                │
│  ───────────────────────────────────────── │
│                                    RESET   │
└──────────────────────────────────────────┘
```

Remove a magazine. The next magazine inserted will be identified as **SERIAL UNLOADING** magazine.

If there is at least one magazine level free, when pressing <SERIAL>, the following screen will be displayed immediately:

```
┌──────────┐  ┌─────────────────────────────────────────┐
│          │  │ SERIAL UNLOADING                        │
├──────────┤  │ INSERT MAGAZINE FOR SERIAL UNLOADING    │
│          │  │ AND CLOSE THE DOOR, PLEASE              │
├──────────┤  ├─────────────────────────────────────────┤
│          │  │                                 RESET   │
└──────────┘  └─────────────────────────────────────────┘
         ┌───┐  ┌───┐  ┌───┐  ┌───┐   ┌───┐
         └───┘  └───┘  └───┘  └───┘   └───┘
```
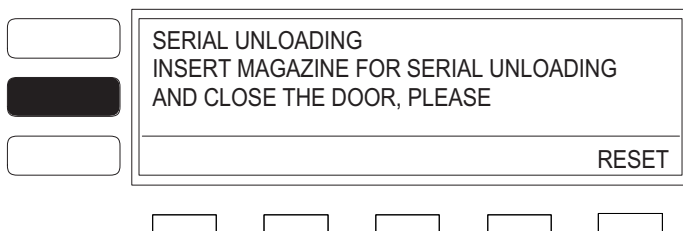
After closing the magazine door, the appropriate empty cassette is requested.

```
┌──────────┐  ┌─────────────────────────────────────────┐
│          │  │ SERIAL UNLOADING                        │
├──────────┤  │ INSERT EMPTY CASSETTE   18 x 24 cm      │
│          │  │                                         │
├──────────┤  ├─────────────────────────────────────────┤
│          │  │                                 RESET   │
└──────────┘  └─────────────────────────────────────────┘
         ┌───┐  ┌───┐  ┌───┐  ┌───┐   ┌───┐
         └───┘  └───┘  └───┘  └───┘   └───┘
```

┌──────────┐
│ NOTE: │
└──────────┘
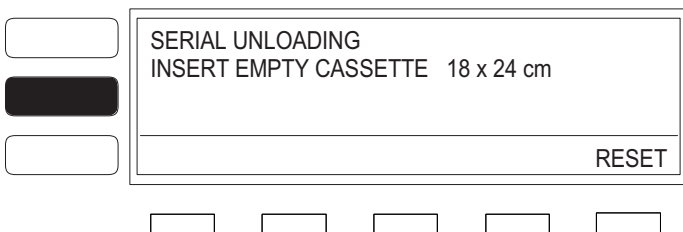
**The KODAK Miniloader 2000 P will check whether the
inserted cassette is empty.
Should that not be the case, <u>NO ERROR MESSAGE WILL BE GIVEN</u>.**

The film (exposed or not) will be unloaded, and **SERIAL UNLOADING** will be started.

During the unload cycle a count of the films removed from the magazine is displayed.

```
┌──────────┐ ┌──────────────────────────────────────────┐
│          │ │  SERIAL UNLOADING  18 x 24 cm            │
├──────────┤ │  5 FILMS UNLOADED                        │
│ ██████   │ │                                          │
├──────────┤ ├──────────────────────────────────────────┤
│          │ │                                  RESET   │
└──────────┘ └──────────────────────────────────────────┘
```
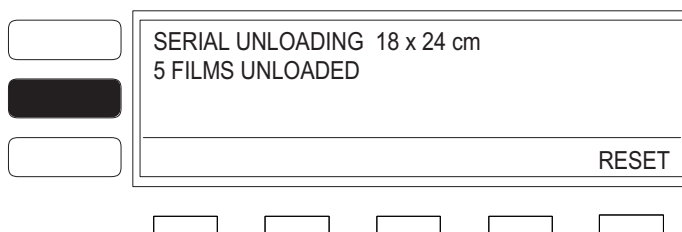
When the magazine is empty, the display shows the following screen. The cassette is returned empty and unlatched.

```
┌──────────┐ ┌──────────────────────────────────────────┐
│          │ │  SERIAL UNLOADING  FINISHED              │
├──────────┤ │  8 FILMS UNLOADED                        │
│ ██████   │ │                                          │
├──────────┤ ├──────────────────────────────────────────┤
│          │ │                                  RESET   │
└──────────┘ └──────────────────────────────────────────┘
```
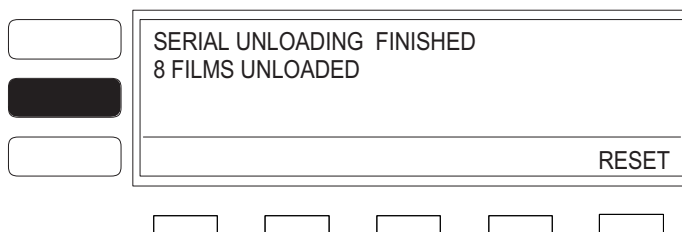
Removing the cassette or pressing <CLEAR> will lead to the standard menu.

Pressing <CLEAR> interrupts the **SERIAL UNLOAD** process and offers normal use for emergency films.

After pressing <CLEAR> the second time, the main menu will be displayed, and the emergency cassette can be inserted.

The serial unload magazine will remain in that status and be indicated on the main display as SU.

Pressing <SERIAL> again the KODAK Miniloader 2000 P will return to **SERIAL UNLOADING,** and the display will ask for the empty cassette.

FUNCTION ....

```
MAG. 1 :   18 x 24 cm   M  #2  ████████
MAG. 2 :   24 x 30 cm   M        █▌ ▐ ▐ ▌
─────────────────────────────────────────────
FUNC   UNLOAD   LOAD    SERIAL   DOOR
```

After pressing <FUNC> the display will show the following.

```
   FUNCTION
─────────────────────────────────────────────
TYPE 2           USAGE   LANG   CLEAR
```

This menu offers you access to functions FILM TYPE 2, FILM USAGE, and LANGUAGES.

FILM TYPE 2

The KODAK Miniloader 2000 P may be "loaded" with either of two different film types of the same size.

In order to prevent a film mix-up, the supply magazines used for film TYPE 2 must be coded by your KODAK SERVICE PROVIDER, or a trained key operator.

Should it be necessary to load cassettes with a different type of film of the same size, <TYPE 2> must be pressed.

The selected special function is valid only for the next cycle.

After removing the cassette from the entrance slot, the KODAK Miniloader 2000 P will return to the normal mode.

FILM USAGE

After pressing <USAGE> the display will show the following:

```
USAGE

2MONTH          TOTAL          CLEAR
```

This function offers the following statistics:

Pressing <2MONTH>   will show the number of films used this month and
                     last month (by sizes and types).

```
FILM USAGE
18 x 24 cm M # 1        MAY: 103
                        APR: 206

             ▽      △              RETURN
```

By means of the soft switches "△ "and "▽" you can scroll
through the film sizes.

Pressing <TOTAL>   will show the number of films used last year and this year.

```
GRAND TOTAL: SINCE JAN /01/96    XXXXX
LAST YEAR          XXXXXX

                                  RETURN
```

By pressing <CLEAR> you can always return to the main menu.

LANGUAGES

The KODAK Miniloader 2000 P offers messages in 12 different languages.

English	Finnish
French	Norwegian
German	Spanish
Italian	Swedish
Danish	Portuguese
Dutch	Japanese

A maximum of 4 languages can be selected. The selection will be made during installation (the factory setting is shown in the figure below, your KODAK SERVICE PROVIDER can change the 4 selected languages during installation or at any later time). To change the displayed language press <LANG> . The display will show the following:
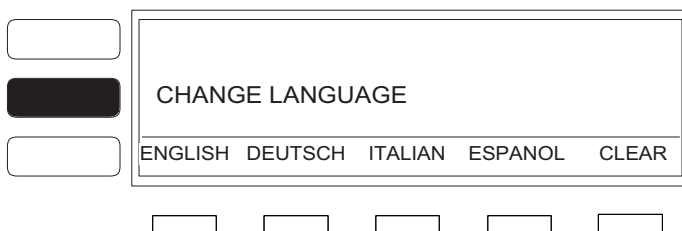
Select the desired language by pressing the respective soft switch.
After your selection the display returns to the main menu.

Press <CLEAR> if you want to cancel your decision.

ERROR MESSAGES

Message Displayed	Explanation
EXPOSED FILM NOT REMOVED. PLEASE CHECK CASSETTE IN DARKROOM.	The cassette may be empty and the user did not choose the <LOAD ONLY> mode. The machine feeds the cassette back, because a film could be sticking to the upper screen inside the cassette.
EXPOSED FILM WAS REMOVED. CASSETTE WAS NOT EMPTY.	The special function <LOAD ONLY> was selected, but a film was in the cassette when it was entered. During SERIAL UNLOADING a cassette containing a film was inserted.
MAGAZINE FOR SERIAL UNLOADING NOT DEFINED	The magazine for SERIAL UNLOADING was not defined.
PLEASE INSERT CORRECT CASSETTE SIZE XX * YY	The cassette entered was incorrect for SERIAL UNLOADING.
EXPOSED FILM NOT REMOVED. PLEASE RE-ENTER CASSETTE.	Cassette was incorrectly inserted. If the message appears repeatedly, check the cassette in the darkroom. If there is no film in the cassette have it checked by your KODAK SERVICE PROVIDER.
FILM SIZE/TYPE NOT AVAILABLE.	The chosen magazine is not available, or used for SERIAL UNLOADING.
FILM SIZE/TYPE NOT AVAILABLE. MAGAZINE XX*YY EMPTY	The chosen magazine was empty when cassette was inserted. The cassette is RETURNED as no film was loaded (it can be returned opened or closed, depending on how it has been set during the installation).
PLEASE CHECK CORRECT MAGAZINE INSERTION.	The magazine is probably not positioned correctly.

Message Displayed	Explanation
PLEASE INSERT CORRECT CASSETTE SIZE	SERIAL UNLOADING. The cassette was unloaded and reloaded.
REMOVE AND CHECK MAGAZINE	If no film was removed from the magazine.
PLEASE RIFFLE FILMS IN MAGAZINE.	The films in the magazine stick to each other, so that no single sheet of film can be removed from the magazine. In the darkroom remove and riffle the films before reloading the magazine.
PLEASE CHECK CASSETTE IN DARKROOM.	a) If there is no film in the cassette, have it checked by your KODAK SERVICE PROVIDER. b) If there is a film in the cassette, the cassette probably contained two films, and one was removed in the KODAK Miniloader 2000 P.
UNEXPOSED FILM LOST.	Cassette closing problem. Cassette returned open.
CASSETTE OUT TRANSPORT FAILED. OPEN COVER TO REMOVE FILM. EXPOSED FILM LOST.	When cassette was opened, the film was not removed. ASSUMPTION: A film is caught in the lightlock of the cassette. Open the top cover of the KODAK Miniloader 2000 P to remove film (see instructions on pages 32 and 33. **The exposed film is lost now.**
CASSETTE OUT TRANSPORT FAILED. OPEN COVER TO REMOVE CASSETTE.	When cassette gets stuck while it is being fed out. Open top cover to remove the cassette (see instructions pages 32 and 33).

Message Displayed	Explanation
EXPOSED FILM LOST FILM JAM IN INTERFACE SYSTEM ERROR	The film did not reach the processor. Press <CLEAR>. Separate KODAK Miniloader 2000 P from KODAK M35-M X-OMAT Processor as described on page 1-35. Look for the film in the KODAK Miniloader 2000 section, and pull the film out, if you can reach it. Then close the unit again and fasten the two clips. If you are not successful, please call your KODAK SERVICE PROVIDER.
EXPOSED FILM LOST FILM JAM AT PROCESSOR ENTRANCE SYSTEM ERROR	The film did not completely enter the processor. Press <CLEAR>. Separate KODAK Miniloader 2000 P from KODAK M35-M X-OMAT Processor as described on page 1-35. Look for the film in the KODAK M35-M X-OMAT Processor section, and pull the film out, if you can reach it. Then close the unit again and fasten the two clips. If you are not successful, please call your KODAK SERVICE PROVIDER.
PLEASE CALL FOR SERVICE.	If this message appears, inform your KODAK SERVICE PROVIDER. These errors can only be solved by your KODAK SERVICE PROVIDER.

HOW TO REMOVE A CASSETTE

To open the top cover turn the two top screws counterclockwise and carefully open the cover.

top screws
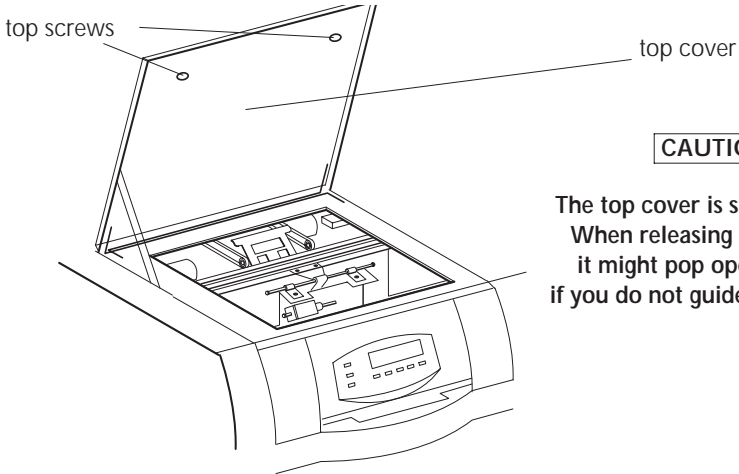
top cover

CAUTION:

**The top cover is spring-loaded.
When releasing the screws,
it might pop open rapidly,
if you do not guide it manually.**

Release cassette by pressing cassette lid.
Push centering bars (see arrows in the following illustration) to full width.

centering bars
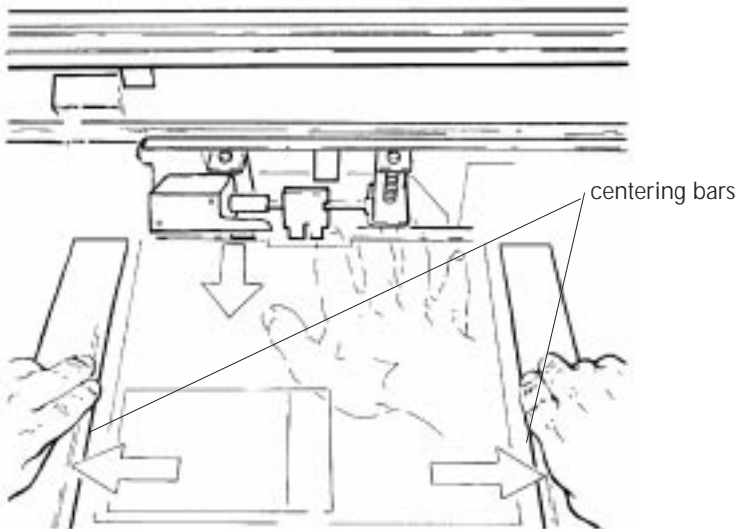
If the film is caught, pull it out of the cassette first (the exposed film is useless now)
Close the cassette. Rotate knob (see illustration below) to open the input flap, and
then carefully push the cassette through the entrance slot.

knob
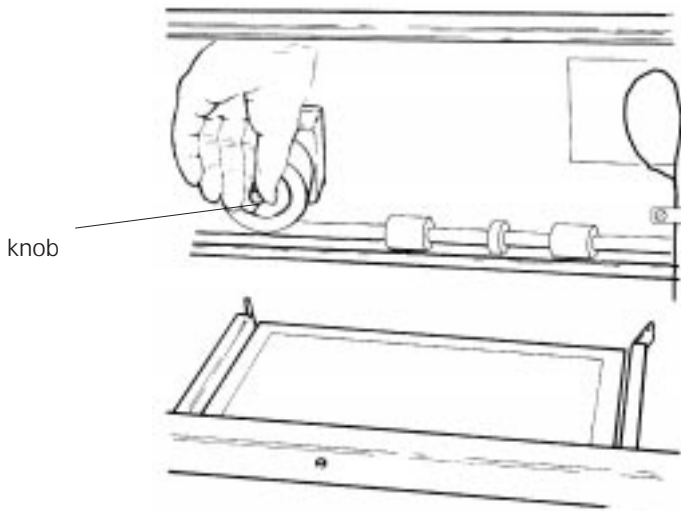
Close the top cover.

Reset the KODAK Miniloader 2000 P by pressing <CLEAR>.

MAINTENANCE

KODAK Miniloader 2000 P ．．

WEEKLY

On a weekly basis, the operator should clean the outside of the
KODAK Miniloader 2000 P from dirt and dust, using a moist cloth.

```
WARNING:

Before cleaning the unit, pull off the power plugs of the KODAK Miniloader 2000 P
and the KODAK M35-M X-OMAT Processor.
```

ONCE A YEAR

Preventive Maintenance by your KODAK SERVICE PROVIDER is recommended.
Please contact your KODAK SERVICE PROVIDER.

INTEGRATED KODAK M35-M X-OMAT PROCESSOR ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．

NOTE:

**For the necessary maintenance of the KODAK M35-M X-OMAT Processor
please refer to the manual supplied with your
KODAK M35-M X-OMAT Processor
and to the information beginning on the next page.**

**SEPARATION OF THE KODAK MINILOADER 2000 P SECTION FROM THE
KODAK M35-M X-OMAT PROCESSOR SECTION**

KODAK
Miniloader 2000 P

cover of the KODAK
M35-M X-OMAT Processor

KODAK
M35-M X-OMAT Processor
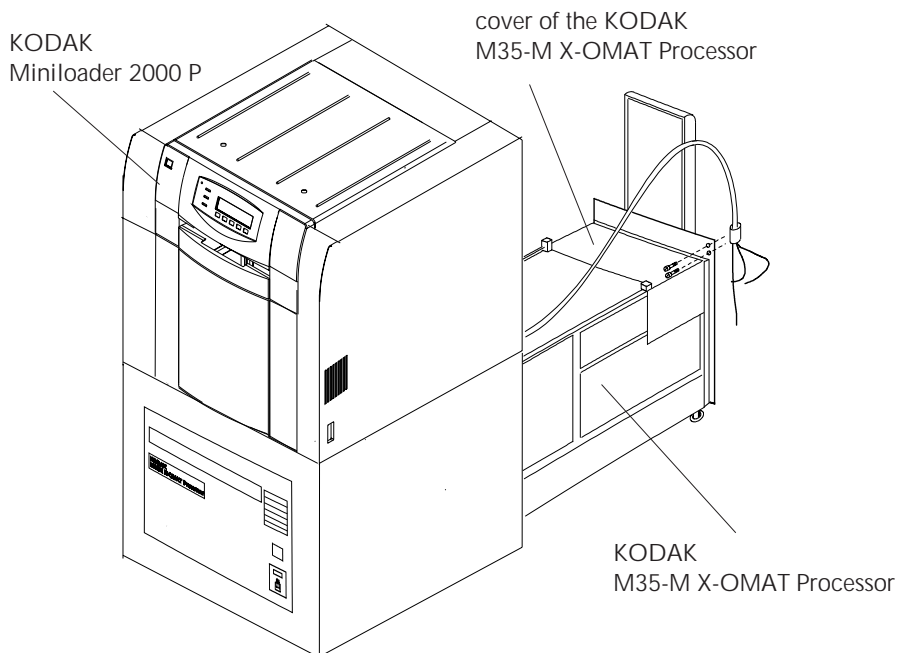
For normal regular cleaning and maintenance of the KODAK M35-M X-OMAT
Processor, the KODAK Miniloader 2000 P section and KODAK M35-M X-OMAT
Processor sections have to be separated.

For that purpose, please take the following steps:

1. Ensure that all films have exited the processor.

2. **Switch off the KODAK Miniloader 2000 P and the KODAK M35-M X-OMAT
   Processor (see illustration on page 1-14) and pull out the power-supply plugs of
   both units.**

3. Release the two clip fastenings at the rear of the KODAK Miniloader 2000 P (see illu-
   stration on page 1-36) and roll out the upper section (as shown in the illustration
   above) until it reaches the end stops.

   This allows full access to the KODAK M35-M X-OMAT Processor.

REAR VIEW

appliance inlet
KODAK Miniloader
2000 P

clip fastenings

power cord with plug
KODAK M35-M
X-OMAT Processor
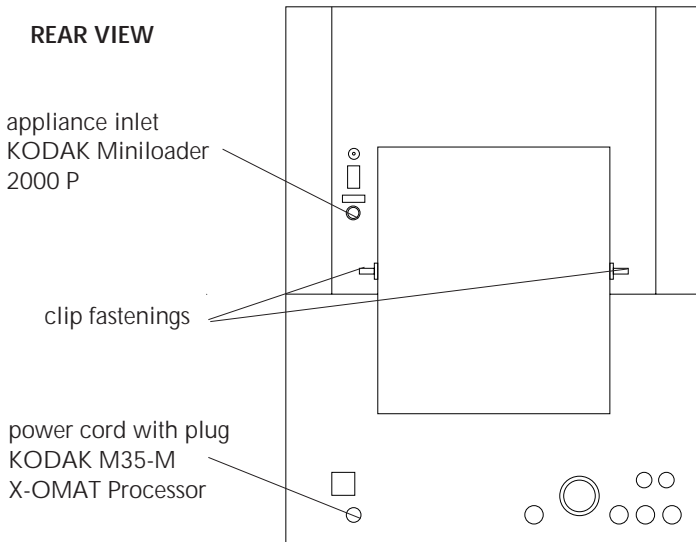
4. Remove the cover of the KODAK M35-M X-OMAT Processor (illustration on page 1-35), and then follow the details given for daily cleaning and preventive maintenance in your **KODAK M35-M X-OMAT Processor Operator Guide**.

| NOTE: |

**The following items of the Operator Guide for the
KODAK M35-M X-OMAT Processor do not apply to the
<u>integrated</u> KODAK M35-M X-OMATProcessor:**

| **Illustration A: 2)** | **Illustration E: 1) 2)** |
| **Illustration I: 1) 2)** | **Illustration L: 1) 2) 3) 4)** |

WARNING:

**Replenishment may only be adjusted by your KODAK SERVICE PROVIDER
or special personnel trained by KODAK.**

To reassemble the unit, please reverse the process described in steps 1 to 4.

ACCESSORY

A kit for the operation with KODAK X-OMATIC Video Film Holders (8" x 10") can be ordered separately and must be installed by your KODAK SERVICE PROVIDER.

WARRANTY

Kodak warrants this KODAK Miniloader 2000 P to function correctly one year from the date of initial installation, when installed within one year from date of shipment.

Warranty Repair Coverage

If this equipment does not function correctly during the warranty period, the distributor (for KODAK Miniloader 2000 P) who sold the equipment will provide or arrange for the repair of the equipment during the distributor´s normal working hours. Such repair service will include any adjustments and/or replacement of parts required to maintain your equipment in good working order.

How to Obtain Service

Should the equipment require service, refer to the sales contract for details on whom to call for service, or contact the distributor (for KODAK Miniloader 2000 P) who sold the equipment.

Limitations

Warranty service is limited to the contiguous United States, the island of Oahu in Hawaii, and certain area of Alaska.

This warranty does not cover

- circumstances beyond the control of Kodak
- misuse
- abuse
- attachments
- accessories
- alterations not marketed by Kodak (including service or parts to correct problems resulting from the use of such attachments, accessories, or alterations)
- failure to follow the operating instructions recommended by Kodak
- supply items

Kodak makes no other warranties, express or implied, for this equipment.

Repair without charge is the only obligation of both Kodak and the distributor under this warranty. Kodak will not be responsible for any consequential or incidental

damages resulting from the sale, use, or improper functioning of this equipment, even if loss or damage is caused by the negligence or other fault of Kodak.

Such damages for which Kodak will not be responsible, include, but are not limited to, loss of revenue or profit, downtime costs, loss of use of the equipment, cost of any substitute equipment, facilities or services or claim of your customers for such damages.

This limitation of liability will not apply to claims for injury to persons or damage to property caused by the sole negligence or fault of Kodak or persons under its direction or control.

KEY OPERATOR INSTRUCTIONS

RESIZING MAGAZINES

When a new film size has to be used in the KODAK Miniloader 2000 P you can code any magazine to hold the new film size. The following sizes can be used:

MAMMOGRAPHY FILM
    18 x 24 cm
    24 x 30 cm

KODAK X-OMATIC Video Film Holder
8 x 10 "
(optionally available as kit)
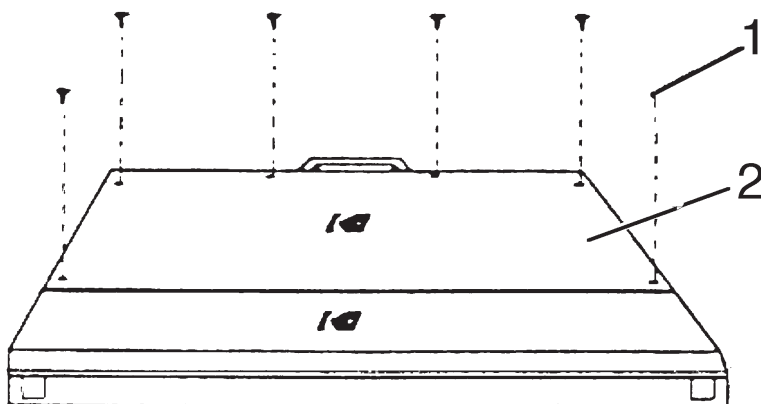
1   screw (6)
2   cover

1.   Remove the cover of the magazine.

2.   Place the stops in the recesses corresponding to the film size. The film sizes are marked in the recesses.

IMPORTANT:

The left and right stops have to be positioned with their noses as indicated in the illustration on page 2-2.
Otherwise the magazine cannot be closed!

2-2
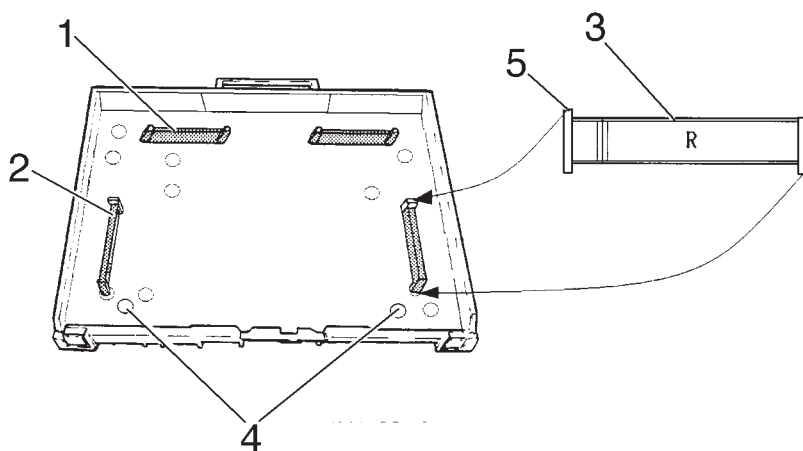
1	stop rear	4	recess with film size
2	stop left	5	nose
3	stop right		

3. Reinstall the cover of the magazine. The mechanical adjustment of the magazine is completed now.

4. To enable the KODAK Miniloader 2000 P to decode the correct magazine size the magazine, please provide the magazines with reflective stickers. The correct position of the stickers can be taken from the following table and illustration:

Film Size	Position B1	Position B2	Position B3	Position B4 (Type 2)
18 x 24 cm	YES	NO	NO	NO
18 x 24 cm M #2	YES	NO	NO	YES
24 x 30 cm	YES	YES	NO	NO
24 x 30 cm M #2	YES	YES	NO	YES
8" x 10 " V (optional)	NO	YES	NO	NO
8" x 10 " V #2 (optional)	NO	YES	NO	YES
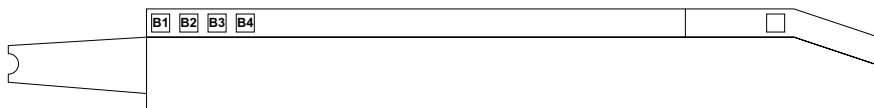
5.   After the reflective stickers have been set:
     Open magazine door of KODAK Miniloader 2000 P .

6.   Insert the recoded magazine and close the magazine door.

7.   Look at the display: Is the correct film size displayed?
     If not, take out the magazine and check the setting of the reflective stickers.

8.   Load the recoded magazine with films.

9.   Check whether there is too much play between the films and the stops in the
     magazine. There must not be more than appr. 4 mm (1/6") clearance between
     the films and the stops. If the play is too great remove the films and check the
     setting of the stops inside the magazine.

10. Load the magazine with films and insert the magazine into the KODAK
     Miniloader 2000 P.

     ┌─────────────┐
     │ **IMPORTANT:** │
     └─────────────┘

**Use the magazine only if you are absolutely sure that the setting of the
reflective stickers and the stops is correct.
Otherwise you can cause serious damage to the
KODAK Miniloader 2000 P.**

FAILURES AND ERROR HANDLING

The KODAK Miniloader 2000 P is a microprocessor-controlled unit that minimizes the actions necessary to solve any possible problems in the unit. Any time there is a failure in the KODAK Miniloader 2000 P the micro-processor will start an automatic error handling sequence.

The KODAK Miniloader 2000 P will always try to save the exposed films. That means whenever a failure occurs during the cycle the KODAK Miniloader 2000 P will try to unload the cassette, process the exposed film and feed out the cassette.

There are two groups of failures which can occur in the KODAK Miniloader 2000 P:

1.   Failures that can only be solved by your KODAK SERVICE PROVIDER.

2.   Failures that can be corrected by the operator or by the KODAK Miniloader 2000 P itself.

Whenever a failure occurs in the cycle of the KODAK Miniloader 2000 P the error and the action to be taken will be displayed.
.
As the display of the KODAK Miniloader 2000 P consists of four lines only, in some cases it will take more than one screen to display the whole error message. In these cases the right hand key is used to obtain more information on the screen.

```
┌─────────────────────────────────────────┐
│ ┌───────────────────────────────────┐   │
│ │                                   │   │
│ │        ERROR  MESSAGE  1          │   │
│ │                                   │   │
│ │                                   │   │
│ ├───────────────────────────────────┤   │
│ │                             MORE  │   │
│ └───────────────────────────────────┘   │
└─────────────────────────────────────────┘
   ▭        ▭        ▭        ▭        ▭
```

```
┌─────────────────────────────────────────────┐
│                                               │
│         ERROR  MESSAGE  2                      │
│                                               │
├───────────────────────────────────────────────┤
│                                          MORE  │
└─────────────────────────────────────────────┘
```

At the end of the messages the following screen will appear:

```
┌─────────────────────────────────────────────┐
│                                               │
│         LAST  ERROR  MESSAGE                   │
│                                               │
├───────────────────────────────────────────────┤
│ CLEAR              CODE            RETURN      │
└─────────────────────────────────────────────┘
```

FUNCTION BUTTONS:
....

<CLEAR>   Press this button after you followed any steps you were told
                       to perform in the error message (if there were any). After this
                       button has been pressed the KODAK Miniloader 2000 P will
                       bring all motors to home position and check their functions.
                       If this procedure was successful, the green status light will
                       appear, and you can start working again with the KODAK
                       Miniloader 2000 P .

                       If this automatic test was not successful an error message will
                       appear again, and in critical failures also the advice to call
                       for service personnel as serious failures are too difficult to be
                       solved by the operator.

<RETURN>   After having pressed this button the first display of the error
                       message appears once more, and you can move through the
                       whole message again.

<CODE>   To give your KODAK SERVICE PROVIDER information
                       concerning the failures which occured this key should be
                       pressed.
                       A code will appear on the display. Please write down the
                       complete code and pass it on to the service personnel as
                       soon as you call for service. With the computer aided
                       diagnostic system the service person can check the possible
                       causes of the failures in advance.
                       With this procedure Kodak is able to minimize the down time
                       of the unit.

                       As long as the error code is displayed <CLEAR> and
                       <RETURN> will also appear.
                       They have the functions as explained above.

KODAK Miniloader 2000 P KEY OPERATOR INSTRUCTIONS

```
┌─────────────────────────────┐
│                             │
│     ERROR  MESSAGE  1        │
│                             │
│                      MORE    │
└─────────────────────────────┘
  ▭    ▭    ▭    ▭    ▭

┌─────────────────────────────┐
│                             │
│     ERROR  MESSAGE  2        │
│                             │
│                      MORE    │
└─────────────────────────────┘
  ▭    ▭    ▭    ▭    ▭

┌─────────────────────────────┐
│                             │
│     LAST  ERROR  MESSAGE     │
│                             │
│ CLEAR        CODE    RETURN  │
└─────────────────────────────┘
  ▭    ▭    ▭    ▭    ▭
                  ERROR  CODE
┌─────────────────────────────┐
│                             │
│        S   M   C             │
│       XX  XX  XX             │
│ CLEAR               RETURN   │
└─────────────────────────────┘
  ▭    ▭    ▭    ▭    ▭
```
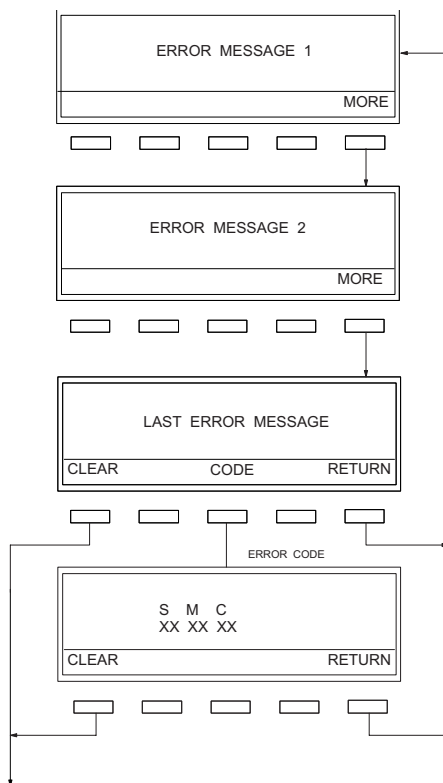
AUTOMATIC RESET OF THE KODAK Miniloader 2000 P
If successful: the unit will be ready for operation again.
If not successful: call for service.

FAILURES NOT DETECTED BY THE KODAK Miniloader 2000 P

Most of the possible failures of the KODAK Miniloader 2000 P are detected by the unit itself. Only the following few are not detectable.

Failures: **Causes:**

Wrong film   Is the correct size displayed by the KODAK Miniloader
                               2000 P?

                               Are all magazines seated correctly?

                               Check the reflective stickers of the magazines
                               (see magazine coding).

                               Further possible causes:

                               If reflective stickers are correct, but wrong size detection:

                               Move magazine to another level. By moving the magazine
                               to another level, the problem of the wrong size detection
                               might be solved, although there is a failure in the size
                               detection. Please inform your KODAK SERVICE
                               PROVIDER of this failure.

                               If magazine detection is o.k.:

                               Are your cassettes o.k.?

Message: If edges are damaged, have the cassette checked by your
Film not available   KODAK SERVICE PROVIDER.
                               If cassette and magazine detection are o.k., call your
                               KODAK SERVICE PROVIDER.